**Eureka Math *A Story of Units***

**Fifth Grade – Module 2**

**2015-2016**

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Materials based on Eureka Math Version 3.

**Module Assessment Overview**

**Purpose of Assessments**

**Mid-Module Assessment:** These tasks address approximately the **first half** of the module’s learning objectives and provide important information for instruction and for grading.

**End-of-Module Assessment:** These tasks are based on all standards addressed in order to gauge students’ full range of understanding of the **module as a whole**. The End-of-Module assessment should carry more weight than the Mid-Module Assessment in terms of student grades in the appropriate domain.

**Administration of Assessments**

* Mid- and End-of-Module Assessments are designed to be completed in approximately one class period. However, The tests can be given over multiple days as needed.
* Assessments are designed to be completed independently by students, without assistance.
* These tasks should not be preceded by review of similar problems.

**Grading Guidance**

The grading scale on Elementary Report Cards has been changed for 2015-2016 and beyond. Please note that ***4 now indicates advanced understanding of grade level standards expected at this time of year.***

**4 – Advanced:** Student demonstrates advanced understanding of grade level standards expected at this time of year.

**3 – Proficient:** Student demonstrates proficiency with grade level standards expected at this time of year*.*

**2 – Basic:** Student demonstrates basic understanding of grade level standards expected at this time of year. Student needs additional support and practice.

**1 – Below Basic:** Student demonstrates minimal understanding of grade level standards expected at this time of year. Student needs significant support and practice.

**Rubrics have been updated to reflect this change. Rubrics have been further modified from Eureka Math originals for clarity, accuracy, and alignment to Bethel’s grade scale.**

**General Grading Guidance:**

* On the report card, student learning is reported by CCSS domain. The Fifth Grade CCSS domains are: Operations and Algebraic Thinking, Number and Operations in Base Ten, Number and Operations – Fractions, Measurement and Data, and Geometry.
* Grades in each domain should be based on multiple sources of evidence, including the Mid- and End-of-Module Assessments. The End-of-Module assessment should carry more weight than the Mid-Module Assessment in terms of student grades in the appropriate domain.

**Module 2 Grading Guidance:**

* Standards 5.NBT.1, 2, 5, and 6 are only/last assessed in Fifth Grade Module 2. The remaining standards in this module will be assessed again in later modules. (See checklist on page 3.)
* Item 6 on the End-of-Module Assessment assesses multiple domains. We recommend scoring item parts separately. Teams may want to quickly calibrate and/or adapt the rubric to better reflect proficiency with the standards assessed. The score sheet has been adjusted to reflect this recommendation.
* Consider adjusting the weight of the domain scores in the grade book. (Less weight for items that reflect one test item, more weight for domains assessed with multiple items.)

**Grade 5 Common Core State Standards Checklist by Module**

This grade-level chart provides an at-a-glance view of when each standard is addressed. The shaded boxes indicted standards assessed in Module 2. Some standards may be assessed again in later modules. *Note that standards included in major clusters are followed by an asterisk (\*)*. Please refer to the Curriculum Overview of *A Story of Units* for a curriculum map and detailed grade-level descriptions including a summary of the year, a rationale of the module sequence, and a standards alignment chart.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| CCSS | | GRADE 5 MODULES | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 5.OA | 1 |  | X |  | X |  |  |
| 2 |  | X |  | X |  | X |
| 3 |  |  |  |  |  | X |
| 5.NBT | 1\* | X | X |  |  |  |  |
| 2\* | X | X |  |  |  |  |
| 3a\* | X |  |  |  |  |  |
| 3b\* | X |  |  |  |  |  |
| 4\* | X |  |  |  |  |  |
| 5\* |  | X |  |  |  |  |
| 6\* |  | X |  |  |  |  |
| 7\* | X | X |  | X |  |  |
| 5.NF | 1\* |  |  | X |  |  |  |
| 2\* |  |  | X |  |  |  |
| 3\* |  |  |  | X |  |  |
| 4a\* |  |  |  | X |  |  |
| 4b\* |  |  |  |  | X |  |
| 5a\* |  |  |  | X |  |  |
| 5b\* |  |  |  | X |  |  |
| 6\* |  |  |  | X |  |  |
| 7a\* |  |  |  | X |  |  |
| 7b\* |  |  |  | X |  |  |
| 7c\* |  |  |  | X |  |  |
| 5.MD | 1 | X | X |  | X |  |  |
| 2 |  |  |  | X |  |  |
| 3a\* |  |  |  |  | X |  |
| 3b\* |  |  |  |  | X |  |
| 4\* |  |  |  |  | X |  |
| 5a\* |  |  |  |  | X |  |
| 5b\* |  |  |  |  | X |  |
| 5c\* |  |  |  |  | X |  |
| 5.G | 1 |  |  |  |  |  | X |
| 2 |  |  |  |  |  | X |
| 3 |  |  |  |  | X |  |
| 4 |  |  |  |  | X |  |

**Fifth Grade Module 2: Mid-Module Assessment Task Score Sheet**

A Progression of Learning

A Progression of Learning is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left to right.  The learning goal for each student is to move to the last step, “Evidence of solid reasoning with a correct answer”.  These steps are meant to help teachers and students identify and celebrate what the student CAN do now, and what they need to work on next.

| Score Key: A Progression of Learning | | | |
| --- | --- | --- | --- |
| Little or no evidence of reasoning with an incorrect answer.  (1 Point) | Evidence of some reasoning with an incorrect answer.  (2 Points) | Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | Evidence of solid reasoning with a correct answer.  (4 Points) |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Module 2: Mid-Module Assessment** | | | | | | | | | | | | | | | | | | |
|  | **Domain** | | | | | | **Standards** | | | | | | | | | | | | |
| Question | Operations and Algebraic Thinking | | | Number and Operations in Base-Ten | | | 5.OA.1 | 5.OA.2 | | 5.NBT.1 | | 5.NBT.2 | | 5.NBT.5 | | 5.NBT.7 | | 5.MD.1 | |
| 1 | 1 2 3 4 | | |  | | | X | X | |  | |  | |  | |  | |  | |
| 2 | 1 2 3 4 | | |  | | |  | X | |  | |  | |  | |  | |  | |
| 3 |  | | | 1 2 3 4 | | |  |  | | X | | X | |  | | X | |  | |
| 4 |  | | | 1 2 3 4 | | |  |  | |  | |  | | X | |  | |  | |
| 5 |  | | | 1 2 3 4 | | |  |  | |  | |  | | X | | X | |  | |
| 6 | 1 2 3 4 | | | 1 2 3 4 | | | X | X | | X | | X | | X | | X | | X | |
|  | | |  | |  | |  | |  | |  | |  | |  | |  | |  | | |
| Domain  Score | Operations and Algebraic Thinking | | | Number and Operations in Base-Ten | | | Note: For more information about standards assessed in this module, see back of this score sheet. | | | |  | | | | | | | | | |
| Total Points |  | | |  | | |
| Level | 4 | 11-12 points | | 4 | | 14-16 points |
| 3 | 8-10 points | | 3 | | 10-13 points |
| 2 | 5-7 points | | 2 | | 6-9 points |
| 1 | 3-4 points | | 1 | | 4-5 points |

Note: The lowest rubric score is 1. Therefore, any student scoring at level 1 for each assessment item will still be assigned some points. This translates to a score of 1 in the grade book.

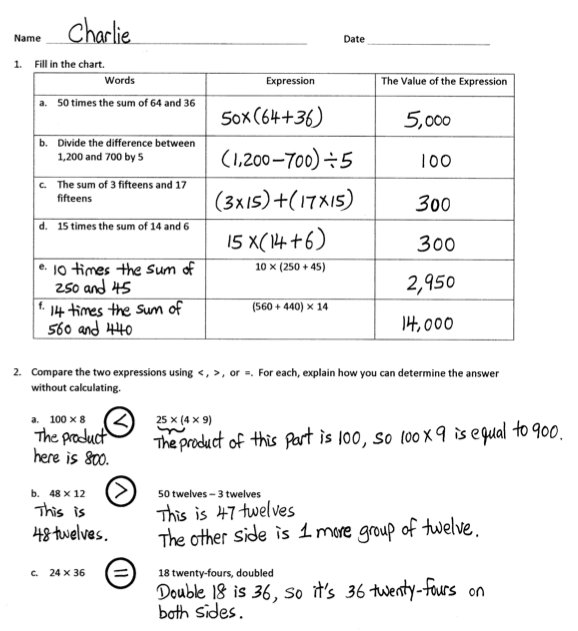
**Fifth Grade Module 2: Mid-Module Assessment Task Score Sheet (continued)**

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| --- |
| Mid-Module Assessment Task (Topics A–D)  Clusters and Standards Addressed |
| **Write and interpret numerical expressions.**  **5.OA.1** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.  **5.OA.2** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.*  Understand the place value system.  **5.NBT.1** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.  **5.NBT.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.  **Perform operations with multi-digit whole numbers and with decimals to hundredths.**  **5.NBT.5** Fluently multiply multi-digit whole numbers using the standard algorithm.  **5.NBT.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.  **Convert like measurement units within a given measurement system.**  **5.MD.1** Convert among different-sized standard measurement units within a given measurement  system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. |

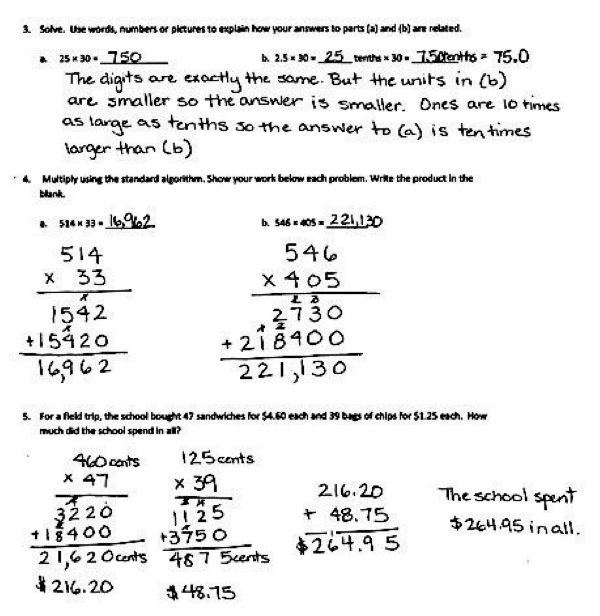
**Fifth Grade Module 2: Mid-Module Assessment Task Rubric**

| A Progression of Learning | | | | |
| --- | --- | --- | --- | --- |
| Assessment  Task Item | STEP 1  Little or no evidence of reasoning with an incorrect answer.  (1 Point) | STEP 2  Evidence of some reasoning with an incorrect answer.  (2 Points) | STEP 3  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | STEP 4  Evidence of solid reasoning with a correct answer.  (4 Points) |
| **1**  **5.OA.1**  **5.OA.2** | The student correctly answers **0-3** of the twelve parts. | The student correctly answers **4-7** of the twelve parts. | The student correctly answers **8-10** of the twelve parts. | The student correctly answers **11- 12** out of the twelve parts.  (See student sample for correct responses.) |
| **2**  **5.OA.2** | The student correctly completes **0-1** of the parts. | The student correctly completes **2-3** of the six parts. | The student correctly completes **4-5** of the six parts. | The student correctly completes **6** of the six parts. (See below.) |
| a. **(1)** < **(2)** explanation  b. **(3)** > **(4)** explanation  c. **(5)** = **(6)** explanation | | | |
| **3**  **5.NBT.1**  **5.NBT.2**  **5.NBT.7** | The student correctly completes **0** of the three parts. | The student correctly completes any **2** of the three parts. | The student correctly answers Parts (a) and (b), and partially explains in Part (3). | The student correctly answers **3** of the three parts. (See below.) |
| 1. **(1)** 750 2. **(2)** 75   **(3)** Explains how answers to Parts (a) and (b) are related. | | | |
| **4**  **5.NBT.5** | The student correctly completes 0 of the two parts. | The student makes minor calculation errors in both parts. | The student correctly completes Parts (a) and (b), but does not use the standard algorithm.  OR  The student makes 1 minor calculation error leading to an incorrect answer in 1 of the two parts. | The student correctly completes 2 of the two parts. (See below.) |
| 1. 16,962 (uses standard algorithm) 2. 221,130 (uses standard algorithm)   **Note: Students may record regroupings in any position.** | | | |
| Assessment  Task Item | STEP 1  Little or no evidence of reasoning with an incorrect answer.  (1 Point) | STEP 2  Evidence of some reasoning with an incorrect answer.  (2 Points) | STEP 3  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | STEP 4  Evidence of solid reasoning with a correct answer.  (4 Points) |
| **5**  **5.NBT.5**  **5.NBT.7** | The student uses incorrect reasoning and neither multiplies nor adds. | The student uses partially correct reasoning (multiplies but does not add, or adds but does not multiply), and makes calculation errors. | The student uses correct reasoning, but makes calculation errors. | The student uses correct reasoning and calculates total correctly as $264.95. |
| **6**  **5.OA.1**  **5.OA.2**  **5.NBT.1**  **5.NBT.2**  **5.NBT.5**  **5.NBT.7**  **5.MD.1** | The student correctly completes **0-1** parts of the task. | The student correctly completes **2-3** of the fiveparts of the task. | The student correctly completes **4** of the five parts of the task. | The student correctly completes **5** of the five parts of the task. (See below.) |
| a. **(1)** 378 feet and **(2)** work shown.  b. **(3)** $37.80 and **(4)** reasoning.  c. **(5)** 84 × 1.5 × 103 or 84 × 103 × 1.5 | | | |

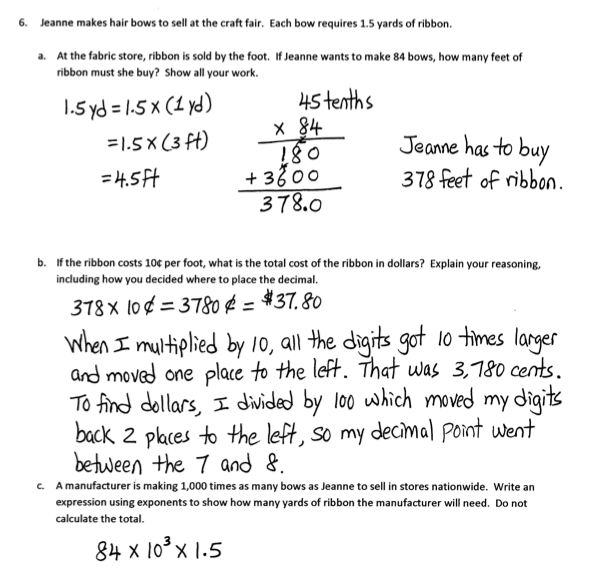
**Fifth Grade Module 2: Mid-Module Assessment Task Key**



**Fifth Grade Module 2: Mid-Module Assessment Task Key (continued)**



**Fifth Grade Module 2: Mid-Module Assessment Task Key (continued)**



**Fifth Grade Module 2: End-of-Module Assessment Task Score Sheet**

A Progression of Learning

A Progression of Learning is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left to right.  The learning goal for each student is to move to the last step, “Evidence of solid reasoning with a correct answer”.  These steps are meant to help teachers and students identify and celebrate what the student CAN do now, and what they need to work on next.

| Score Key: A Progression of Learning | | | |
| --- | --- | --- | --- |
| Little or no evidence of reasoning with an incorrect answer.  (1 Point) | Evidence of some reasoning with an incorrect answer.  (2 Points) | Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | Evidence of solid reasoning with a correct answer.  (4 Points) |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Module 2: End-of Module Assessment** | | | | | | | | | | | | | | | | | | |
|  | **Domain** | | | | | **Standards** | | | | | | | | | | | | | |
| Question | Number and Operations in Base-Ten | | | Operations and Algebraic Thinking | | 5.NBT.1 | 5.NBT.2 | | | 5.NBT.5 | | 5.NBT.6 | | 5.NBT.7 | | 5.OA.1 | | 5.OA.2 | 5.MD.1 |
| 1 | 1 2 3 4 | | |  | | X | X | | |  | |  | | X | |  | |  |  |
| 2 | 1 2 3 4 | | |  | | X | X | | |  | | X | |  | |  | |  |  |
| 3 | 1 2 3 4 | | | 1 2 3 4 | |  |  | | |  | | X | |  | | X | |  |  |
| 4 | 1 2 3 4 | | |  | |  |  | | |  | |  | | X | |  | |  |  |
| 5 | 1 2 3 4 | | |  | |  |  | | |  | | X | |  | |  | |  |  |
| 6 a, b, c, e | 1 2 3 4 | | |  | | X | X | | | X | | X | | X | |  | |  | X |
| 6 d |  | | | 1 2 3 4 | |  |  | | |  | |  | |  | | X | | X |  |
|  | | |  | | |  | |  | | |  | |  | |  | |  | | | | |
| Domain  Score | Number and Operations in Base-Ten | | | Operations and Algebraic Thinking | |  | | | Note: For more information about standards assessed in this module, see back of this score sheet. | | | | | | | | | | | |
| Total Points |  | | | \*Consider less emphasis on this score in the grade book since it reflects only two items. | |  | | |
| Level | 4 | 21-24 pts. | | 4 | 7-8 pts. |  | | |
| 3 | 15-20 pts. | | 3 | 5-6 pts. |  | | |
| 2 | 9-14 pts. | | 2 | 3-4 pts. |  | | |
| 1 | 6-8 pts. | | 1 | 2 pts. |  | | |

Note: The lowest rubric score is 1. Therefore, any student scoring at level 1 for each assessment item will still be assigned some points. This translates to a score of 1 in the grade book.

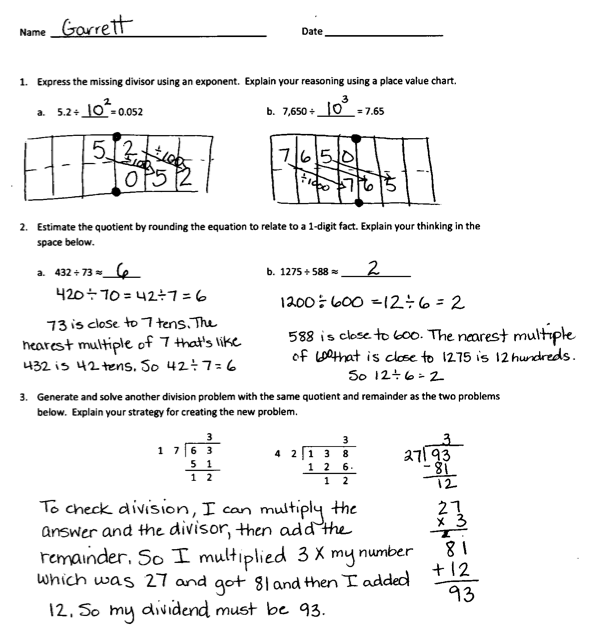
**Fifth Grade Module 2: End-of-Module Assessment Task Score Sheet**

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| --- |
| End-of-Module Assessment Task (Topics A–H)  Clusters and Standards Addressed |
| **Write and interpret numerical expressions.**  **5.OA.1** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.  **5.OA.2** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.*  **Understand the place value system.**  **5.NBT.1** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.  **5.NBT.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.  **Perform operations with multi-digit whole numbers and with decimals to hundredths.**  **5.NBT.5** Fluently multiply multi-digit whole numbers using the standard algorithm.  **5.NBT.6** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.  **5.NBT.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.  **Convert like measurement units within a given measurement system.**  5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. |

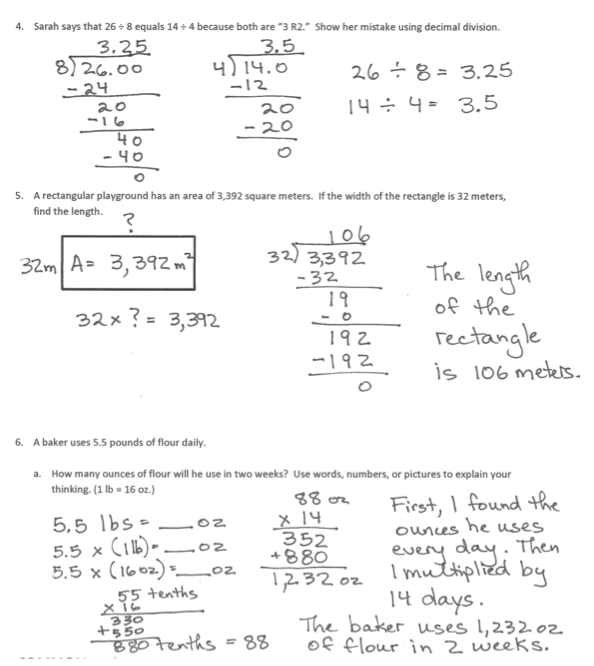
**Fifth Grade Module 2: End-of-Module Assessment Task Rubric**

| A Progression of Learning | | | | |
| --- | --- | --- | --- | --- |
| Assessment  Task Item | STEP 1  Little or not evidence of reasoning with an incorrect answer.  (1 Point) | STEP 2  Evidence of some reasoning with an incorrect answer.  (2 Points) | STEP 3  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | STEP 4  Evidence of solid reasoning with a correct answer.  (4 Points) |
| **1**  **5.NBT.1**  **5.NBT.2**  **5.NBT.7** | The student correctly answers **0-1** of the four parts. | The student correctly answers **2** of the four parts. | The student correctly answers **3** of the four parts. | The student correctly answers **4** of the four parts. (See below.) |
| 1. **(1)** 100 or 102 or both **(2)** reasoning including a place value chart 2. **(3)** 1000 or 103 or both **(4)** reasoning including a place value chart | | | |
| **2**  **5.NBT.1**  **5.NBT.2**  **5.NBT.6** | The student correctly completes **0-1** of the four parts. | The student correctly completes **2** of the four parts. | The student correctly completes **3** of the four parts. | The student correctly completes **4** of the four parts. (See below.) |
| 1. **(1)** 420 ÷ 70 = 6 and **(2)** explanation 2. **(3)** 1200 ÷ 600 =2 and **(4)** explanation | | | |
| **3**  **5.OA.1**  **5.NBT.6** | The student is unable to generate a division problem with a quotient of 3 and remainder of 12. | The student generates a division problem with either a quotient of 3 or a remainder of 12, but is unable to explain reasoning used. | The student generates a division problem with both a quotient of 3 and a remainder of 12, but shows no evidence of a strategy other than guess and check. | The student generates a division problem with a quotient of 3 and remainder of 12 and uses a sound strategy (e.g., writes a checking equation \_\_ = 3 x \_\_+ 12). |
| **4**  **5.NBT.7** | The student is unable to perform the decimal division necessary to show non-equivalence of quotients. | The student is able to perform the division necessary to produce the whole number portion of the quotient, but is unable to continue dividing the decimal places to show non-equivalence of quotients. | The student is able to explain the non-equivalence of the quotients, but with errors in the division calculation. | The student divides accurately and explains the non-equivalence of the quotients. |
| **5**  **5.NBT.6** | The student does not divide to find the width of the playground. | The student makes two errors in division that lead to incorrect width of the playground. | The student makes one error in division that leads to incorrect width of the playground. | The student correctly divides and finds the width of the rectangle to be 106 m. |
| Assessment  Task Item | STEP 1  Little or not evidence of reasoning with an incorrect answer.  (1 Point) | STEP 2  Evidence of some reasoning with an incorrect answer.  (2 Points) | STEP 3  Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer.  (3 Points) | STEP 4  Evidence of solid reasoning with a correct answer.  (4 Points) |
| **6a, b, c, and e**  **5.NBT.1**  **5.NBT.2**  **5.NBT.5**  **5.NBT.6**  **5.NBT.7**  **5.MD.1** | The student correctly answers **0-1** of the seven parts. | The student correctly answers **2-4** of the seven parts. | The student correctly answers **5-6** of the seven parts. | The student correctly answers **7** of the seven parts. (See below.) |
| 1. **(1)** 1232 oz **(2)** explain 2. **(3)** 102 loaves 3. **(4)** 7 boxes **(5)** explain reasoning 4. (See below.)   e. **(6)** $8.00  **(7)** explain | | | |
| **6d**  **5.OA.1**  **5.OA.2** | The student is unable to write an equation that shows how much the baker will spend. | The student writes an equation with major errors. | The student writes a partially correct equation that shows how much the baker will spend. | **d.** The student writes an equation that shows how much the baker will spend.  Example:  (20 × 0.80) + (6 × $1.25) |

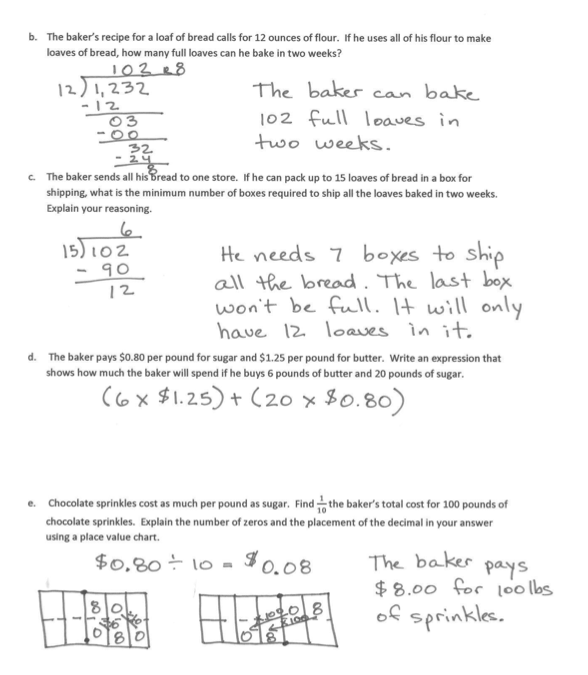
**Fifth Grade Module 2: End-of-Module Assessment Task Key**

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**Fifth Grade Module 2: End-of-Module Assessment Task Key (continued)**



**Fifth Grade Module 2: End-of-Module Assessment Task Key (continued)**

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